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L4: Entry 10 of 15 File: USPT Aug 17, 1999

US-PAT-NO: 5940844
DOCUMENT-IDENTIFIER: US 5940844 A

TITLE: Method and apparatus for displaying electronic image of a check

DATE-ISSUED: August 17, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cahill; Thomas	Newton	NJ		
McMonagle; John J.	Bayonne	NJ		
Sferra; Richard H.	Plainview	NY		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
The Chase Manhattan Bank, NA					02

APPL-NO: 08/ 435538 [PALM]
DATE FILED: May 5, 1995

PARENT-CASE:
This is a division of application Ser. No. 08/342,265, filed Nov. 18, 1994.

INT-CL: [06] G06 F 17/40, G06 F 17/60

US-CL-ISSUED: 707/526; 705/45, 382/138, 382/140, 235/379
US-CL-CURRENT: 715/526; 235/379, 382/138, 382/140, 705/45

FIELD-OF-SEARCH: 395/233, 395/245, 382/112, 382/137, 382/138, 382/140, 705/33, 705/42, 705/44, 705/45, 235/379, 235/376, 707/526

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4315246	February 1982	Milford	382/140
☐	4352100	September 1982	O'Connell	
☐	4722444	February 1988	Murray et al.	209/583
☐	4821332	April 1989	Durham	382/140
☐	4876735	October 1989	Martin et al.	382/310
☐	4914709	April 1990	Rudak	382/311
☐	5028869	July 1991	Holt	382/138
☐	5040227	August 1991	Lyke et al.	382/138
☐	5151948	September 1992	Lyke et al.	382/138
☐	5161214	November 1992	Addink et al.	707/1
☐	5170466	December 1992	Rogan et al.	707/530
☐	5187750	February 1993	Behera	382/140
☐	5193121	March 1993	Elischer et al.	382/138
☐	5208869	May 1993	Holt	382/138
☐	5257323	October 1993	Melen et al.	382/310
☐	5274567	December 1993	Kallin et al.	364/478.01
☐	5301350	April 1994	Rogan et al.	395/800
☐	5321238	June 1994	Kamata et al.	395/245
☐	5321816	June 1994	Rogan et al.	705/42
☐	5321831	June 1994	Hirose	707/10
☐	5359667	October 1994	Borowski et al.	382/138
☐	5444794	August 1995	Uhland, Sr.	395/245
☐	5455875	October 1995	Chevion et al.	382/311
☐	5495929	March 1996	Batalianets et al.	194/207
☐	5506691	April 1996	Bedner et al.	358/402
☐	5519786	May 1996	Courtney et al.	382/159
☐	5526447	June 1996	Shepard	382/311
☐	5530773	June 1996	Thompson	382/138
☐	5544043	August 1996	Miki et al.	705/45
☐	5550932	August 1996	Blaylock et al.	382/139
☐	5592377	January 1997	Lipkin	705/42
☐	5602936	February 1997	Green et al.	382/140
☐	5740271	April 1998	Kunkler et al.	382/137

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0207468	January 1987	EP	
0573922	December 1993	EP	
1487507	October 1977	GB	
2244583	April 1991	GB	
8605610	September 1986	WO	

OTHER PUBLICATIONS

DIALOG File 636, Acc. # 01463826: "Bank Get Big Response to Image Staments", Electronic Imaging Report, May 6, 1992, vol. 2, No. 9 (3 pages).
DIALOG File 148, Acc. # 06397449: "NCR's ATM Captures Images at the Point of Deposit", Financial Services Report, Jan. 20, 1993, V. 10, N. 2, p. 8 (2 pgs).
DIALOG File 15, Acc. # 00806174: "Banks Turn Imaging Into Speedy New Delivery Products", D.A. Atneette, Corp. Cashflow, Jan. 1994, v. 15, N. 1, pp. 12-13 (3 pages).
DIALOG File 15,. Acc # 00897187: "Why Digitization Means Dollars . . . ", B. Wells, Corp. Cashflow, Aug. 1994, V. 15, N. 9, pp. 30-32 (5 pages).

ART-UNIT: 277

PRIMARY-EXAMINER: Thomas; Joseph

ATTY-AGENT-FIRM: Ostrolenk, Faber, Gerb & Soffen, LLP

ABSTRACT:

A method and apparatus for storing and retrieving images of documents, e.g. checks. The method comprises placing a plurality of documents in a document imaging machine and forming an electronic image of each document, storing each electronic image in an electronic storage device, providing at least one user interface device in communication on a communication link with the electronic storage device, placing a request for at least one document image on the user interface device, transmitting the request by the communication link to the electronic storage device, searching the electronic storage device for the requested electronic image of the document, retrieving the at least one electronic image or providing an indication that the image was not found, storing the electronic image, if found, in an electronic file, for transmission to the user interface device at user option, providing the electronic image to the user interface device at command of a user at the user interface device for storage at the user interface device and displaying the requested electronic image on a display of the user interface device. Preferably, the electronic, images are stored with embedded identifying information in a TIFF.RTM. (trademark of Aldus Corp.) file format and the check images can be displayed on a display device which permits the user to view both sides of the checks simultaneously and perform functions such as zooming and rotation of the images.

24 Claims, 39 Drawing figures

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End of Result Set

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L9: Entry 1 of 1 File: USPT Aug 17, 1999

DOCUMENT-IDENTIFIER: US 5940844 A
TITLE: Method and apparatus for displaying electronic image of a check

DATE ISSUED (1):
19990817

Brief Summary Text (66):
According to the invention, a facility to incorporate the check images into customer correspondence is preferably provided. An operator may select a document template that is created with an industry available word processing package. The document and check images are merged along with address information of the recipient (payee) to create a document that can be sent to the payee to confirm that the check was received by the payee and paid. An operator may print out the document to send to a payee via conventional mail delivery service such as the Postal Service. However, if the system software is installed on a workstation that supports outgoing fax services via modem communications, an operator may fax the correspondence directly to a payee's fax machine. This automated correspondence processing represents a significant improvement in the time it takes to prepare correspondence and send it to a payee.

Brief Summary Text (76):
Also according to the preferred embodiment, the documents comprise checks each having a magnetic ink code line thereon, and the invention further comprises electronically reading and decoding the magnetic ink code line to form decoded magnetic ink coded data and the step of storing comprises merging the electronic image and the decoded magnetic ink coded data into a tagged image file format (TIFF.RTM. [a registered mark of Aldus Corp.]) file, with the decoded magnetic ink coded data stored in a tag field in the TIFF file, each check being associated with a TIFF file, and storing the TIFF file in the electronic storage device.

Drawing Description Text (35):
FIG. 24 shows the Customer Information screen employed in entering document header data to be inserted into documents incorporating check images that are sent to a client;

Detailed Description Text (369):
Once a template is selected, the workstation software will cause the word processing software to be invoked, loading the selected document into the word processor, and inserting the header information (FIG. 24) and front and back check images into it (FIG. 25). If the View option is selected (described below), the document can then be edited and printed as any other word processed document. If the Print option is selected (also described below), the document is printed prior to being editable in the word processor. Finally, the user may exit the word processor in the customary way, and, as will be understood by one of skill in the art, the user must take care not to save the letter under its pre-defined name. If the operator desires to save the just created letter, it can be saved under another name, as the operating environment and word processor permit, for example by using the File/Save As function in Word to give it a new name.

Detailed Description Text (371):
In creating the document in the preferred embodiment, the customer information

screen data is placed in a Word.TM. document utilizing a Word.TM. function known as bookmarks, wherein each field of information in the customer information screen corresponds to a particular "bookmark" that has been inserted into the pre-defined document/letter. Although reference may be had to one of the many books which discuss the use of "bookmarks" in Word.TM., creating the pre-defined letters with the appropriately placed bookmarks is briefly discussed in a later section. Alternatively, a word processor merge function can be used to merge the information with a pre-defined document/letter.

Detailed Description Text (379):
This section relates to creating a pre-formatted form letter. Many methods of creating merged output of data from two separate sources are well known in the art. These methods include, but are not limited to: bookmarks, as discussed herein; a merge, also known as a mail merge, wherein data in named fields is merged into a document containing references to those fields; an application program which formats a letter, reading text from two or more pre-existing files; or the sequential entry of data items at markers in a stream of data.

Detailed Description Text (391):
As can be seen by one of ordinary skill in the art, the names of the bookmarks are dictated by those "expected" by the workstation software. In another embodiment, the workstation software could permit the operator to determine the names. In another embodiment, the data could be inserted into a document at specified marks, like bookmarks, that are not unique, but instead, are sequence dependent. In yet another embodiment, as can be seen by one of skill in the art, the workstation software could create, print and permit editing of the form letter without the use of an auxiliary word processor such as Words.TM..

Current US Cross Reference Classification (4):
705/45

L4: Entry 10 of 15 File: USPT Aug 17, 1999

DOCUMENT-IDENTIFIER: US 5940844 A
TITLE: Method and apparatus for displaying electronic image of a check

DATE ISSUED (1):
19990817

Brief Summary Text (66):
According to the invention, a facility to incorporate the check images into customer correspondence is preferably provided. An operator may select a document template that is created with an industry available word processing package. The document and check images are merged along with address information of the recipient (payee) to create a document that can be sent to the payee to confirm that the check was received by the payee and paid. An operator may print out the document to send to a payee via conventional mail delivery service such as the Postal Service. However, if the system software is installed on a workstation that supports outgoing fax services via modem communications, an operator may fax the correspondence directly to a payee's fax machine. This automated correspondence processing represents a significant improvement in the time it takes to prepare correspondence and send it to a payee.

Brief Summary Text (76):
Also according to the preferred embodiment, the documents comprise checks each having a magnetic ink code line thereon, and the invention further comprises electronically reading and decoding the magnetic ink code line to form decoded magnetic ink coded data and the step of storing comprises merging the electronic image and the decoded magnetic ink coded data into a tagged image file format (TIFF.RTM. [a registered mark of Aldus Corp.]) file, with the decoded magnetic ink coded data stored in a tag field in the TIFF file, each check being associated with a TIFF file, and storing the TIFF file in the electronic storage device.

Detailed Description Text (371):
In creating the document in the preferred embodiment, the customer information screen data is placed in a Word.TM. document utilizing a Word.TM. function known as bookmarks, wherein each field of information in the customer information screen corresponds to a particular "bookmark" that has been inserted into the pre-defined document/letter. Although reference may be had to one of the many books which discuss the use of "bookmarks" in Word.TM., creating the pre-defined letters with the appropriately placed bookmarks is briefly discussed in a later section. Alternatively, a word processor merge function can be used to merge the information with a pre-defined document/letter.

Detailed Description Text (379):
This section relates to creating a pre-formatted form letter. Many methods of creating merged output of data from two separate sources are well known in the art. These methods include, but are not limited to: bookmarks, as discussed herein; a merge, also known as a mail merge, wherein data in named fields is merged into a document containing references to those fields; an application program which formats a letter, reading text from two or more pre-existing files; or the sequential entry of data items at markers in a stream of data.

Current US Cross Reference Classification (4):
705/45

WEST

Generate Collection Print

L4: Entry 12 of 15 File: USPT Nov 25, 1997

US-PAT-NO: 5691524
DOCUMENT-IDENTIFIER: US 5691524 A
**** See image for Certificate of Correction ****

TITLE: Electronic check presentment system having a non-ECP exceptions notification system incorporated therein

DATE-ISSUED: November 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Josephson; Stanley M.	Dallas	TX		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
J.D. Carreker and Associates, Inc.	Dallas	TX			02

APPL-NO: 08/ 648482 [PALM]
DATE FILED: May 15, 1996

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation of Ser. No. 08/236,632, filed Apr. 29, 1994 now abandoned which is a continuation-in-part of application Ser. No. 08/023,364, now U.S. Pat. No. 5,412,190 filed on Feb. 26, 1993, for an "Electronic Check Presentment System Having a Return Item Notification System Incorporated Therein," which was a continuation-in-part of original application Ser. No. 731,529, now U.S. Pat. No. 5,237,159 filed on Jul. 17, 1991 for an "Electronic Check Presentment System."

INT-CL: [06] G06 F 17/60, G06 F 15/30

US-CL-ISSUED: 235/379; 364/406, 364/408
US-CL-CURRENT: 705/40; 235/375, 705/42

FIELD-OF-SEARCH: 235/379, 364/401, 364/406, 364/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4264808	April 1981	Owens et al.	235/379
☐	4270042	May 1981	Case	235/379
☐	4523330	June 1985	Cain	382/7
☐	4694397	September 1987	Grant et al.	364/408
☐	4823264	April 1989	Deming	364/408
☐	4948174	August 1990	Thomson et al.	283/58
☐	4974878	December 1990	Josephson	283/67
☐	5038283	August 1991	Caveney	364/403
☐	5121945	June 1992	Thomson et al.	283/58
☐	5237159	August 1993	Stephens et al.	235/379
☐	5265007	November 1993	Barnhard, Jr. et al.	364/408
☐	5373550	December 1994	Campbell et al.	235/379
☐	5412190	May 1995	Josephson et al.	235/379

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
57-164368	October 1982	JP	
57-187762	November 1982	JP	

OTHER PUBLICATIONS

"V Series Item Processing System Tape Input/Output Module", Unisys brochure, 5 pages.

ART-UNIT: 254

PRIMARY-EXAMINER: Hajec; Donald T.

ASSISTANT-EXAMINER: Rodriguez; Douglas X.

ATTY-AGENT-FIRM: Hitt, Chwang & Gaines, P.C.

ABSTRACT:

Disclosed are an improved electronic check presentment ("ECP") system having a non-ECP exceptions notification system incorporated therein and a method of electronically communicating data pertaining to non-ECP exceptions. The method, for use by a presenting bank and a payor bank having check presentment systems between which data related to checks may be electronically transmitted, comprises the steps of: (1) electronically transmitting, from the presenting bank to the payor bank, predetermined presentment information relating to the checks and permitting a determination by the payor bank as to which of the checks are properly payable by the payor bank, (2) comparing records of an exceptions file with records of a receive control file, the exceptions file capable of containing records subject to both ECP and non-ECP exceptions to thereby produce an electronic file of the which of the checks are properly payable by the payor bank and (3) electronically transmitting the electronic file to the presenting bank to thereby provide advance electronic return notification of both ECP and non-ECP exceptions to checks presented by the presenting bank to the payor bank.

27 Claims, 19 Drawing figures

L4: Entry 12 of 15 File: USPT Nov 25, 1997

DOCUMENT-IDENTIFIER: US 5691524 A
**** See image for Certificate of Correction ****
TITLE: Electronic check presentment system having a non-ECP exceptions notification system incorporated therein

DATE ISSUED (1):
19971125

Detailed Description Text (40):
Illustrated are standard CPCS 407 modules, each of which has processes well known in the art. Very briefly, the DKNMICR module 409 includes all of the modules for interfacing with sorters for MICR capture and sorting. An OLRR SCI module 411 "edits" or checks the MICR line for each item provided by the DKNMICR modules for validity (e.g., the transit/routing number and account number). The format DIFYPEU and pocket code module 413 formats the MICR data for the item and assigns the item a pocket code for DDA or other posting system processing. This MICR data and the pocket code are written to an "all-items" I-string information file 417, that is a mass data storage ("MDS") file, in step 415. At merge step 419, the I-string information file 417 is converted to an M-string data file 421 by, in essence, stripping all control documents from the file. The CPCS extract module 423 then extracts the data necessary for posting to DDA or other posting systems.

Current US Original Classification (1):
705/40

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L4: Entry 15 of 15 File: USPT Aug 17, 1993

US-PAT-NO: 5237159
DOCUMENT-IDENTIFIER: US 5237159 A

TITLE: Electronic check presentment system

DATE-ISSUED: August 17, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stephens; Thomas S.	Addison	TX		
Anderson; George B.	Freehold	NJ		
Mills; Daniel R.	Los Angeles	CA		
Sherman; Richard A.	Marlboro	NJ		
Drollinger; Harry B.	McKinney	TX		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
J. D. Carreker and Associates	Dallas	TX			02

APPL-NO: 07/ 731529 [PALM]
DATE FILED: July 17, 1991

INT-CL: [05] G06F 15/30

US-CL-ISSUED: 235/379; 364/406, 364/408
US-CL-CURRENT: 705/30; 235/379, 705/42, 705/45

FIELD-OF-SEARCH: 364/401, 364/406, 364/408, 235/379

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4264808	April 1981	Owens et al.	235/379
☐	4270042	May 1981	Case	235/379
☐	4523330	June 1985	Cain	235/379
☐	4694397	September 1987	Grant et al.	364/408
☐	4823264	April 1989	Deming	364/408
☐	5038283	August 1991	Caveney	364/401

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
164368	October 1982	JP	364/408

OTHER PUBLICATIONS

UNISYS, Brochure, 2 pages describing "V Series Item Processing System Tape Input/Output Module."

ART-UNIT: 255

PRIMARY-EXAMINER: Shepperd; John W.

ATTY-AGENT-FIRM: Hubbard, Thurman, Tucker & Harris

ABSTRACT:

An Electronic Check Presentment System provides a bank with a fully automated capability for participating in the electronic exchange of check data. It allows banks that utilize the system to take MICR data that has been obtained through check capture methods, selectively extract particular check records and place them in the form of electronic cash letters, transfer the electronic cash letters to selected banks, receive electronic cash letters from other banks, reconcile the electronic cash letters against the paper cash letters when they arrive, and input the electronic MICR data into a database responsible for maintaining check records.

46 Claims, 11 Drawing figures

End of Result Set

Generate Collection Print

L4: Entry 15 of 15 File: USPT Aug 17, 1993

DOCUMENT-IDENTIFIER: US 5237159 A
TITLE: Electronic check presentment system

DATE ISSUED (1):
19930817

Detailed Description Text (43):
Illustrated are standard CPCS modules 407, each of which having processes well known in the art. Very briefly, the DKNMICR modules 409 includes all of the modules for interfacing with sorters for MICR capture and sorting. The OLRR SCI module 411 "edits" or checks the MICR line data for each item provided by the DKNMICR modules for validity (e.g. the routing/transit number and account number). Module 413 formats the MICR data for the item and assigns the item a pocket code for DDA or other posting system processing. This MICR data and the pocket code are written to an "all-items" I-String Information file 417, which is a mass data storage (MDS) file, in step 415. At merge step 419, the I-String Information file is converted to an M-String data file 421, by, in essence, stripping all control documents from the file. The CPCS extract module 423 then extracts the data necessary for posting to DDA or other posting systems.

Current US Cross Reference Classification (3):
705/45